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and 2

Similarly, the N-terminal truncation AL1(101-352) cofractionated with GST-mRb, whereas truncations at positions 110 and 119 were unable to bind GST-mRb. Together, these results mapped the limits of pRB binding domain between AL1 amino acids 101 and 180. Thus, the C-termini of the pRb binding and oligomerization domains of TGMV AL1 are contiguous, whereas an additional 33 N-terminal amino acids are required for Rb binding (data not shown).

In the Claims:

Please cancel claims 1-41 and 56-59, without prejudice to the filing of a divisional application thereon.

✓ ✓
Please cancel claims 49 and 55, for the purpose of rewriting.

Please enter the following amended claims:

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~~42 (amended). A nucleic acid construct, which construct comprises, in the 5' to 3' direction:~~

~~(a) a promoter operable in a plant cell,~~

~~(b) a nucleic acid sequence encoding a mutant AL1 protein, said nucleic acid sequence located downstream from said promoter and operatively associated therewith, and comprising a mutation in the Rb binding region, whereby binding of said mutant AL1 protein to a plant Rb protein is reduced compared to binding which would occur in the presence of a wild-type AL1 protein, wherein said nucleic acid sequence comprises a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9 and SEQ ID NO:10; and~~

~~(c) a termination sequence positioned downstream from said nucleic acid sequence and operatively associated therewith.~~

43 (amended). The A nucleic acid construct according to claim 42, wherein said nucleic acid construct is carried by a plant transformation vector.

112.1 44 (amended). The nucleic acid construct according to claim 42, where said nucleic acid sequence encodes a trans-dominant negative mutant AL1 protein. *rec'd the seq.*

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concl'd 112.1 45 (amended). The nucleic acid construct according to claim 44, wherein said trans-dominant negative mutant AL1 protein has a mutation in a domain selected from the group consisting of the oligomerization domain, the DNA cleavage domain, and the ATPase domain.

112.1 46 (amended). The nucleic acid construct according to claim 42, wherein said nucleic acid sequence encodes an AL1 protein with increased repression of transcription from the AL1 promoter, compared to a wild-type AL1 protein.

47 (amended). The nucleic acid construct according to claim 42, wherein said promoter is constitutively active in said plant.

48 (amended). The nucleic acid construct according to claim 42, wherein said nucleic acid sequence comprises a sequence selected from the group consisting of SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:8.

B3 50 (amended). A nucleic acid construct, which construct comprises, in the 5' to 3' direction:

- (a) a promoter operable in a plant cell,
- (b) a nucleic acid sequence encoding a mutant AL1 protein, said nucleic acid sequence located downstream from said promoter and operatively associated therewith, and comprising a mutation in the oligomerization domain to produce a trans-dominant negative mutant AL1 protein, wherein said nucleic acid sequence comprises a sequence selected from the group consisting of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9 and SEQ ID NO:10; and
- (c) a termination sequence positioned downstream from said nucleic acid sequence and operatively associated therewith.

51 (amended). The DNA construct according to claim 50 carried by a plant transformation vector.

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cancel

52 (amended). The DNA construct according to claim 50, wherein said nucleic acid sequence further comprises a mutation in the Rb binding region, whereby binding of said mutant AL1 protein to a plant Rb protein is reduced compared to binding which would occur in the presence of a wild-type AL1 protein.

53 (amended). The DNA construct according to claim 50, wherein said nucleic acid sequence encodes an AL1 protein with increased repression of transcription from the AL1 promoter, compared to a wild-type AL1 protein.

54 (amended). The DNA construct according to claim 50, wherein said promoter is constitutively active in a plant cell.